

Asbestos Form #2
ACP / Aggressive Index Determination

This form is to be completed only by public water systems that have determined or suspect asbestos cement piping/components (ACP) to be present in the water system's distribution network. This form will assist systems with evaluating the corrosive nature of the water (via aggressive index calculation) to determine if asbestos monitoring in the distribution system will be required. Systems that have ACP and also have aggressive water will be required to monitor for asbestos. Systems that have ACP but do not have aggressive water will be eligible for a waiver.

Water System Name: _____

PWSID #: _____

- 1) Please use **Table 1** below to identify the location and approximate length of each area served by ACP in your distribution system network. Please indicate whether or not an area with ACP is considered physically or hydraulically isolated from other distribution areas.
- 2) If ACP is present in your distribution system, and you would like to be eligible for a waiver from asbestos monitoring, you must determine the Aggressive Index of the water using recent water quality data (for each physically or hydraulically isolated distribution system area with ACP) and the calculation provided below.
 - Analysis of a distribution system sample for pH, alkalinity, and hardness is required. The results must be from within **the past 3 years**, and a copy of the supporting analytical data must be attached.
 - To calculate the Aggressive Index of the water, please use the following formula:

$$\text{pH} + \log \text{ of } (\text{Alkalinity} \times \text{Hardness})^* = \text{Aggressiveness Index}$$

Example: $(7) + \log (100 \text{ mg/L} \times 100 \text{ mg/L}) = \text{Aggressiveness Index}$
 $(7) + \log (10,000) \text{ or } (7) + (4) = 11$

*Note alkalinity and hardness will both be equal to the concentration of CaCO_3 (in mg/L or ppm) in finished water for this calculation.

- Record the aggressive index calculation results in the appropriate column of **Table 1** below.

If the Aggressive index is > 11 , your water system is eligible for a waiver from asbestos monitoring in this area.

If the Aggressive index is ≤ 11 , a distribution sample for asbestos must be collected and analyzed.

Table 1 – ACP Survey

Location of service area with ACP	Approx. length of ACP in this area	Is this area physically or hydraulically isolated from other distribution areas? Yes / No	Aggressive Index value for this area	Is a sample for asbestos required for this area? (based on the aggressive index)

3) If an area with ACP is determined to have aggressive water, then distribution system sampling for asbestos is required as specified below. (Note: this sampling requirement is applicable for each physically or hydraulically isolated area with ACP.)

- Asbestos sampling and analysis is required to be conducted during the first three-year compliance period (2011-2013) of the nine-year cycle as specified below by the Department for your classification:
 - a. CWS - sampling must be completed by December 31, 2012
 - b. NTNCWS - sampling must be completed by December 31, 2013
- Asbestos analysis must be performed by a laboratory certified by the state to perform Transmission Electron Microscopy (TEM). Information on NJ certified laboratories can be found at <http://www.nj.gov/dep/oqa/certlabs.htm> or by calling (609) 292-3950.
- Analytical Results must be submitted to the Bureau electronically through the E2 system by the water system's laboratory within 10 days following the end of the required monitoring period.

4) Note the following if you have ACP in your distribution system and you also have a vulnerable source as identified in Asbestos Form #1, Section I:

- a. If you have ACP *with aggressive water* and you also have a vulnerable source, then your asbestos sampling requirements will be met by sampling in the distribution system area(s) with ACP. You do not need to also conduct point of entry sampling unless the water from the vulnerable source supplies an area other than the area(s) served by ACP.
- b. If you have ACP *without aggressive water* (i.e., distribution sampling would not be required) and you also have a vulnerable source, then asbestos sampling is required at each point of entry associated with a vulnerable source as specified in Asbestos Form #1, Section II.

By my signature below, I certify under penalty of law that all of the information either contained with or within this Form is accurate to the best of my knowledge.

Name (printed)

Title

Phone number

Signature

Date